

**TRANSLATION**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference<br><b>CC4003105PCT</b>                                    | <b>FOR FURTHER ACTION</b>  | See Form PCT/IPEA/416  |
| International application No.<br><b>PCT/FR2004/050714</b>                                       | International filing date ( <i>day/month/year</i> )<br><b>16.12.2004</b> | Priority date ( <i>day/month/year</i> )<br><b>17.12.2003</b> |
| International Patent Classification (IPC) or national classification and IPC<br><b>D04H3/05</b> |  |  |
| Applicant<br><b>SAINT-GOBAIN VETROTEX FRANCE S.A.</b>   |  |  |

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| 1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.   |
| 2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.   |
| 3. This report is also accompanied by ANNEXES, comprising:<br>a. <input type="checkbox"/> ( <i>sent to the applicant and to the International Bureau</i> ) a total of _____ sheets, as follows:<br><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).<br><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.<br>b. <input type="checkbox"/> ( <i>sent to the International Bureau only</i> ) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions). |
| 4. This report contains indications relating to the following items:<br><input checked="" type="checkbox"/> Box No. I Basis of the report<br><input type="checkbox"/> Box No. II Priority<br><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability<br><input type="checkbox"/> Box No. IV Lack of unity of invention<br><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement<br><input type="checkbox"/> Box No. VI Certain documents cited<br><input type="checkbox"/> Box No. VII Certain defects in the international application<br><input type="checkbox"/> Box No. VIII Certain observations on the international application   |

|   |                                   |
|---|-----------------------------------|
| Date of submission of the demand        | Date of completion of this report |
| Name and mailing address of the IPEA/EP | Authorized officer                |
| Facsimile No.                           | Telephone No.                     |

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/FR2004/050714

Box No. I

Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-10 as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- nos. 1-11, pages 11,12 as originally filed/furnished
- nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the drawings:
- sheets 1/1, figures 1,2 as originally filed/furnished
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/FR2004/050714

| Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement   |                    |     |
|-----------|---|--------------------|-----|
| 1.        | Statement   |                    |     |
|           | Novelty (N)   | Claims <u>1-11</u> | YES |
|           |   | Claims _____       | NO  |
|           | Inventive step (IS)   | Claims _____       | YES |
|           |   | Claims <u>1-11</u> | NO  |
|           | Industrial applicability (IA)   | Claims <u>1-11</u> | YES |
|           |   | Claims _____       | NO  |
| 2.        | Citations and explanations (Rule 70.7)  |                    |     |
| 1.        | Prior art   |                    |     |
| D1:       | WO 02/084005 A (ROEDERER FRANCOIS; SAINT GOBAIN VETROTEX (FR); DROUX MICHEL (FR); AST) 24 October 2002 (2002-10-24)   |                    |     |
| D2:       | FR-A-2 503 115 (INOUE JAPAX RESEARCH INC) 8 October 1982 (1982-10-08)   |                    |     |
| 2.        | Novelty   |                    |     |
| 2.1       | Claims 1 to 11  |                    |     |
|           | D1 is considered to be the closest prior art.   |                    |     |
|           | D1 describes a method and a facility for producing a continuous strand mat from at least one roving (or reel) by spraying onto a conveyor belt.   |                    |     |
|           | The difference between claim 1 (and respectively claim 8) lies in the fact that the speed of the roving reel is governed by a motor driving the reel directly so that the roving is unwound at a constant linear speed. |                    |     |
|           | The subject matter of claims 1 and 8 is therefore novel (PCT Article 33(1) and (2)). The same applies to dependent claims 2 to 7 and 9 to 11.   |                    |     |
| 3.        | Inventive step  |                    |     |
| 3.1       | Claims 1 and 8  |                    |     |

| Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement  |
|-----------|--|
|           | <p>The closest prior art is D1 (cf. paragraph 2.1 above).</p> <p>The problem solved by the difference (cf. paragraph 2.1 above) is that of preventing too frequent breakage of the strands caused by unwinding the rovings (or reels) by traction.</p> <p>The solution consists in replacing the traction device of D1 by a motor driving the reel directly so that the linear speed of the roving is constant.</p> <p>This solution is described in D2. It applies to the unwinding of heavy reels weighing up to 30 Kg (page 2, line 24), for which the strand must be unwound and conveyed to its work area in an extremely regular manner and with minimum unwinding resistance (page 2, line 35 to page 3, line 3). The nozzle through which the strand passes only applies a slight tension thereto, said tension being imparted thereto by the pressurised fluid (present application, page 6, lines 16 to 27).</p> <p>All that is required is to replace the traction device of D1 with a regular unwinding system as described in D2. To a person skilled in the art seeking to solve the stated problem, replacing the traction device of D1 with the unwinding device of D2 is a routine technical step and considered obvious.</p> <p>Claim 1 and claim 8, covering respectively the method and the facility are not considered inventive within the meaning of PCT Article 33(1) and (3).</p> <p>3.2     Dependent claims 2 to 7 and 9 to 11</p> <p>The features of the dependent claims are all described in D1 and D2 (pulley and encoding device: figures 1, 2; page 8, line 16 to page 10 line 15).</p> <p>Claims 2 to 7 and 9 to 11 are therefore not inventive (PCT Article 33(1) and (3)).</p> |